

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alcassedan, Virginia 22313-1450 www.emplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,245	06/20/2003	Sandeep Bhatia	14532US01	5543
23446 7590 10/13/2010 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER	
			VO, TUNG T	
			ART UNIT	PAPER NUMBER
cinerioo, ii				•
			MAIL DATE	DELIVERY MODE
			10/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/600 245 BHATIA, SANDEEP Office Action Summary Examiner Art Unit Tuna Vo 2483 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 09/07/2010. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-11 and 16-26 is/are pending in the application. 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-11 and 16-26 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 20 June 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _______.

Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 5, 8, 11, and 22-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. "a forward order of display at normal speed" is not disclosed anywhere in the specification; and "every picture is displayed" is not disclosed in the specification; "wherein the queue directly transmits the indicators from the first processor to the second processor" is not disclosed in the specification.

Claim Rejections - 35 USC § 102

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

 Claims 1-11, 16-21, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Abelard et al. (US 7.130.526).

Re claims 1 and 5, Abelard discloses a system for displaying images on a display (fig. 1), said system comprising:

a decoder (9 of fig. 1, a video decoder, col. 4, lines 14-20) for decoding encoded images and parameters associated with the images (DECODING MANAGER of fig. 1, there are parameters for decoding as shown in figure 5, 1, B, P parameters), thereby resulting in decoded images and decoded parameters associated with the decoded images (26 of fig. 1, A, B, and C are decoded memories to store the decoded image and the decoded parameters, fig. 7, A memory stored 12, P8, B"1, B"0, P5, B9, P5, 1'2, P'2, P'8, B1, B0 accordance to decoding per frame period);

Application/Control Number: 10/600,245

Art Unit: 2483

image buffers (26 of fig. 1, A, B, C are decoded image buffers) for storing the decoded images;

a FIFO (DISPLAY MANAGER of fig. 2, col. 5, lines 37-42; col. 5, lines 43-col. 6, line 10; fig. 3) for storing indicators (the descriptors are shared by the decoding manager and the display manager, col. 5, lines 43-46) indicating images to be displayed (col. 6, lines 39-51, identifying the next picture to be displayed; col. 6, lines 66-col. 7, line 3) in a forward display order at normal speed (col. 6, lines 66-col. 7, line 3; note In forward mode, Next(N) returns the ID of following picture to be displayed according to normal display order (i.e. in respect to the temporal reference). In backward mode. Next(N) returns the ID of the previous picture according to normal display order); and

a display engine (14 of fig. 1) for presenting the images indicated by the FIFO for display.

Re claims 2 and 6, Abelard further discloses the A, B, and C buffers (26 of fig. 1) buffer inherently has parameter buffers for storing the decoded parameters (I, B, P parameters as shown in figure 5) associated with the images (e.g. I, B, and P picture).

Re claims 3 and 7, Abelard further discloses wherein the display engine (14 of fig. 1) presents the images indicated by the queue for display by receiving the decoded parameters and displaying the decoded images based on the decoded parameters.

Re claim 4, Abelard further discloses wherein the decoder comprises a first processor (9 of fig. 1) and the display engine comprises a second processor (14 of fig. 1).

Re claim 8, Abelard discloses a circuit (fig. 1) for displaying images on a display (14 of fig. 1), said circuit comprising:

Art Unit: 2483

```
a processor (10 fig. 1);
a memory (24 of fig. 1) operably coupled to the processor,
said memory storing a plurality of executable instructions (col. 4, lines 21-24),
wherein the plurality of executable instructions (figs. 2-6) cause:
```

decoding encoded images and parameters associated with the images (figs. 3 and 5), thereby resulting in decoded images and decoder parameters associated with the decoded images (fig. 4);

storing the decoded images (26 of fig. 1);

storing indicators indicating images to be displayed in a FIFO (DISPLAY MANAGER of fig. 2, note the Display Manager checks every 40 ms which picture is to be displayed. In other words, it identifies the reconstruction buffer containing the picture to be displayed, Col. 5, line 54-col.6, line 20) in a forward display order at normal speed (col. 6, lines 66-col. 7, line 3; note In forward mode, Next(N) returns the ID of following picture to be displayed according to normal display order (i.e. in respect to the temporal reference). In backward mode. Next(N) returns the ID of the previous picture according to normal display order); and

presenting the images indicated by the stored indicators for display (14 of fig. 1, see fig. 3).

Re claim 9, Abelard further discloses storing the decoded parameters (I, B, P parameters as shown in figure 5) associated with the images (A, B, and C of fig. 7).

Re claim 10, Abelard further discloses wherein the instructions causing presenting the images further comprise instructions causing receiving the decoded parameters and displaying the decoded images based on the decoded parameters (fig. 3).

Art Unit: 2483

Re claim 11, Abelard further discloses a circuit (fig. 1) for displaying images on a display, said circuit comprising:

a first processor (10 of fig. 1);

a first memory (24 of fig. 1) operably coupled to the first processor,

said first memory storing a plurality of instructions for execution by the first processor (col. 4, lines 21-24),

wherein the plurality of executable instructions cause (Note Receiver 1 also comprises a reprogrammable non-volatile memory 24, which holds the receiver's operating system, device drivers and other software modules. The receiver's software is executed by the microprocessor): decoding encoded images and parameters associated with the images (DECODER MANAGER of fig. 2, note Video Decoding Manager has previously received through a queue from the Overall Control a complete command ordering and specifying the decoding and/or the display of this particular picture. Based on this command, the Video Decoding Manager programs the decoding of the newly detected picture), thereby resulting in decoded images and decoder parameters associated with the decoded images (e.g. fig. 7, note A, B, and C buffers are storing the decoded images and decoded parameters that are 12, B"3, P5 associated with the pictures);

storing the decoded images (A, B, and C of fig. 1);

storing indicators indicating images to be displayed in a FIFO (DISPLAY MANAGER of fig. 2) in a forward display order at normal speed (col. 6, lines 66-col. 7, line 3; note In forward mode, Next(N) returns the ID of following picture to be displayed according to normal display order (i.e. in respect to the temporal reference). In backward mode. Next(N) returns the ID of the previous picture according to normal display order); and

Art Unit: 2483

a second processor (14 of fig. 1) operably coupled to the queue (col. 5, line 53-col. 6, line7);

a second memory (DISPLAY MANAGER of fig. 2 for storing a software descriptor, col. 5, lines 43-46) operably coupled to the second processor (14 of fig. 1), said second memory storing a plurality of instructions (fig. 6, there are instructions) for execution by the second processor (e.g., fig. 6), wherein the plurality of executable instructions cause:

presenting the images indicated by the indicators for display (figs. 3 and 6).

Re claims 16 and 21, Abelard further discloses wherein the FIFO (DISPLAY MANAGER of fig. 2) stores the indicators (queue) in the particular order prior to the display engine displaying the images associated with the indicators in the order corresponding to the order that the indicators are stored in the FIFO (see also fig. 7).

Re claims 17-20, Abelard further discloses wherein each indicator indicates a different image to be displayed (fig. 3, 1, B, or P picture is displayed; see fig. 7).

Re claim 26, Abelard further teaches wherein the queue directly transmits the indicators from the first processor to the second processor (col. 5, lines 43-46).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2483

 Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abelard et al. (US 7.130.526) in view of Zhou (US 6.353.700).

Re claims 22-25, Abelard teaches the display for display video pictures based on the identification, but not every picture is displayed.

However, Zhou teaches every frame is displayed after only one MPEG decoding process (col. 6, lines 39-50).

Therefore, taking the teachings of Abelard and Zhou together as a whole, it would have been obvious to one of ordinary skill in the art to modify the teachings of Zhou into Abelard to improve display order.

Response to Arguments

 Applicant's arguments filed 09/03/2010 have been fully considered but they are not persuasive.

The applicant argues that Abelard does not disclose "displayed in forward order at normal speed", "wherein the queue directly transmits the indicators from the first processor to the second processor", and "every picture is displayed".

The examiner strongly disagrees with the applicant. It is submitted that Abelard discloses displayed in forward order at normal speed (col. 6, lines 66-col. 7, line 3; note In forward mode, Next(N) returns the ID of following picture to be displayed according to normal display order (i.e. in respect to the temporal reference) and wherein the queue directly transmits the indicators from the first processor to the second processor (col. 5, lines 43-46; note These descriptors are shared by the Video Decoding Manager and the Display Manager. Before programming a

Application/Control Number: 10/600,245

Art Unit: 2483

decoding, the Video Decoding manager tests if the reconstruction buffer that must receive this picture is available).

Zhou teaches every frame is displayed after only one MPEG decoding process (col. 6, lines 39-50).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Wednesday, Friday.

Art Unit: 2483

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Ustaris can be reached on 571-272-7383. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tung Vo/

Primary Examiner, Art Unit 2483